20 XS 120

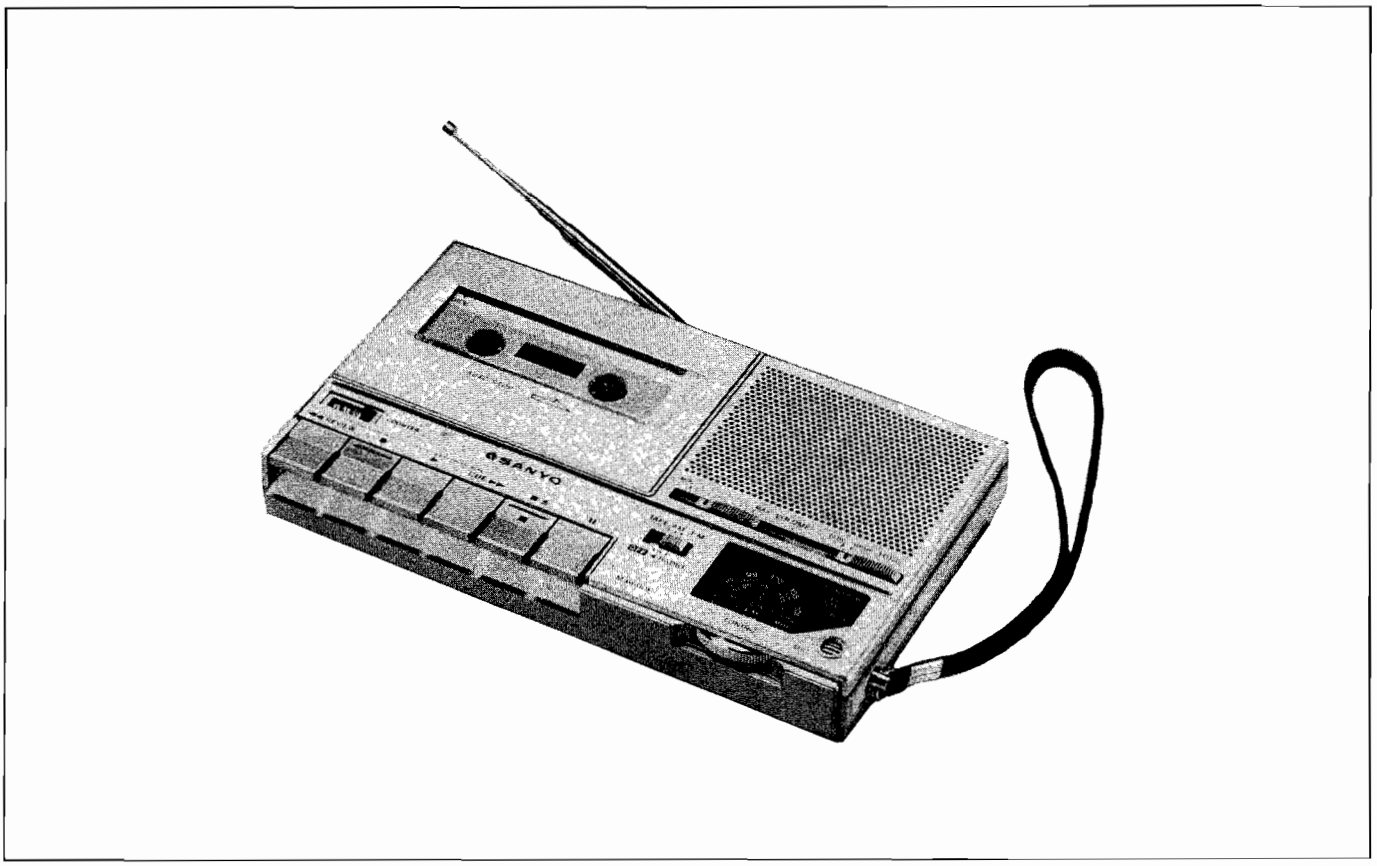
1041

SERVICE MANUAL

SANYO

CASSETTE RECORDER

M6600F



SPECIFICATIONS

Recording system:	AC bias, double track
Erasing system:	DC erase
Rewind & fast forward time:	2 min. 16 sec. (C-60)
Frequency response:	200 ~ 8,000Hz
Terminal impedance:	Mic: 3.3kΩ (1mV)
	Earphone: 100Ω
Frequency range:	FM: 88 ~ 108MHz
	AM: 525 ~ 1605kHz
Output power:	0.5W
Power source:	AC: 120/200/240V (AC adaptor)
	DC: 6V (UM-3) x 4
Dimensions:	192(W) x 31.5(H) x 116(D)mm
Weight:	Approx. 780 gr. (including batteries)

* Specifications subject to change without notice.

DISASSEMBLY OF THE SET

Remove batteries from battery case, or pull off AC adapter.

(1) Removal of back lid (Fig. 1)

a. Unfasten 6 screws off the back lid (5 pan head screws 2 x 6mm, 1 pan head screw 2 x 20mm).

b. The rod antenna lead is connected to the printed circuit board (62). Separate either end of the lead by using a soldering iron.

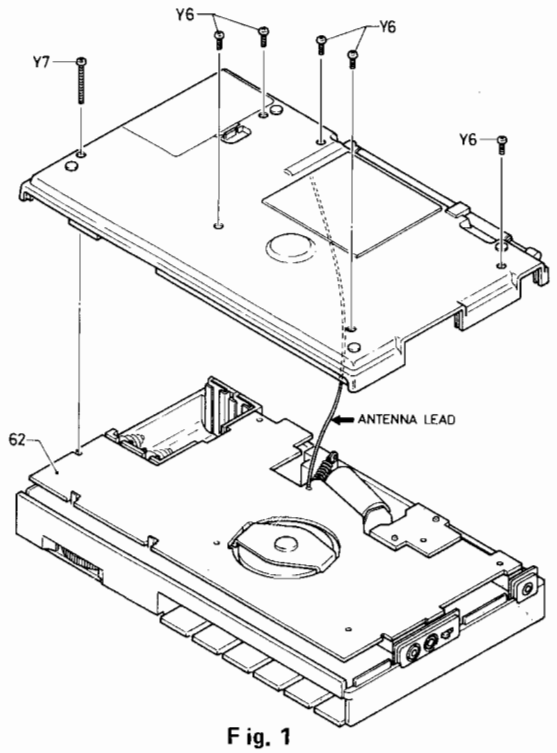


Fig. 1

(2) Removal of PCB (62) (Fig. 2)

a. Take off 2 screws from PCB (1 pan head screw 2 x 4mm, 1 pan head screw 2 x 20mm).

b. Remove bracket sockets (13, 14).

c. Separate 11 leads soldered to PCB. Rotate PCB 180 degrees about the antenna coil, then the ports lodged side will be exposed. The PCB can be repaired or checked in this state.

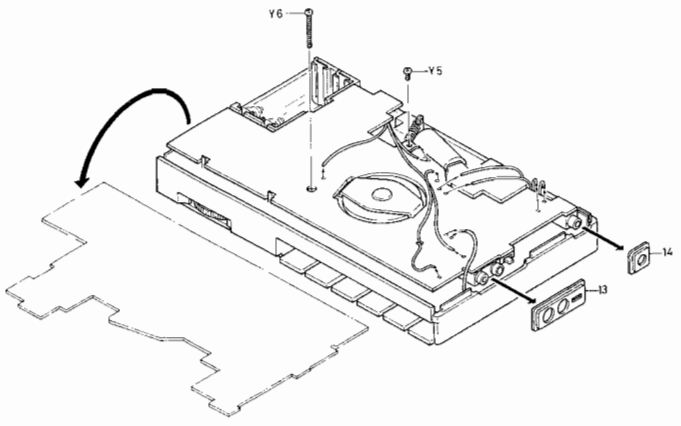


Fig. 2

(3) Removal of sub-chassis (Fig. 3)

a. Remove screw (42) and washer 2 x 6 x 0.4mm (Y10) from dial scale, and dismount dial scale (34) and rotary knob (33).

b. Take out screw (Y3) from variable capacitor gear (36), and remove gear also.

c. Dismount gear (35) and shaft (37) by removing nut (Y9).

d. Unfasten 2 screws (Y2) off the variable capacitor.

e. Pull out slide knob (38).

f. Clear off 4 pawls of PCB from sub-chassis (31), then the subchassis can be dismounted.

NOTE:

Use care not to cut antenna coil leads. When repairing or replacing the parts, reassmble in the original positions (paying attention to the direction, angle, and configuration of the parts). The same caution is necessary when fitting the leads.

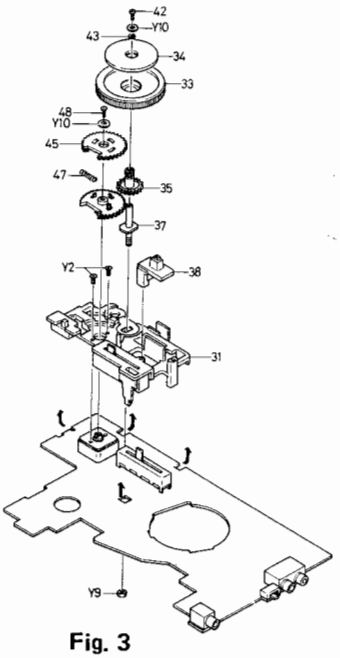


Fig. 3

(4) Removal of mechanism (Fig. 4)

a. After removal procedures (1) and (2), take out spring coil (8) for cassette lid opening.

b. Remove 3 screws of the mechanism (2 pan head screws 2 x 4mm, 1 pan head screw 2 x 6mm).

c. Push the veil port (40) of the machanism, and the mechanism can be taken out.

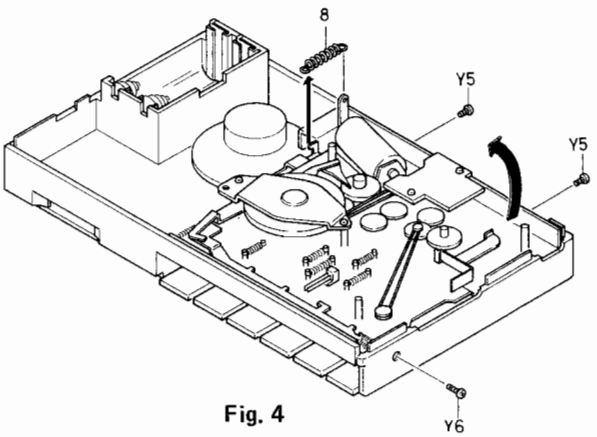


Fig. 4

OPERATION OF AUTO-STOP MECHANISM

(in play and record mode)

Below is explained the operation until an auto-stop, referring mainly to the actions in play mode.

(1) Press down PLAY lever. Then, PLAY slide (8) projects forward to be engaged with slides (27, 28) (one for switching action, the other for locking). These slides (27, 28) move in the lateral direction. (See Fig. 5)

(2) As lide (27) goes aside, auto-stop detection lever (32) is forced to press tight against auto-stop tip lever (94) by the spring coil (34). (See Fig. 5.)

(3) The auto-stop tip lever (94) pressed by auto-stop detection lever (32) is caused to move, together with levers (95, 97), towards the tube (89) of PLAY take-up roller (84). (See Fig. 5.)

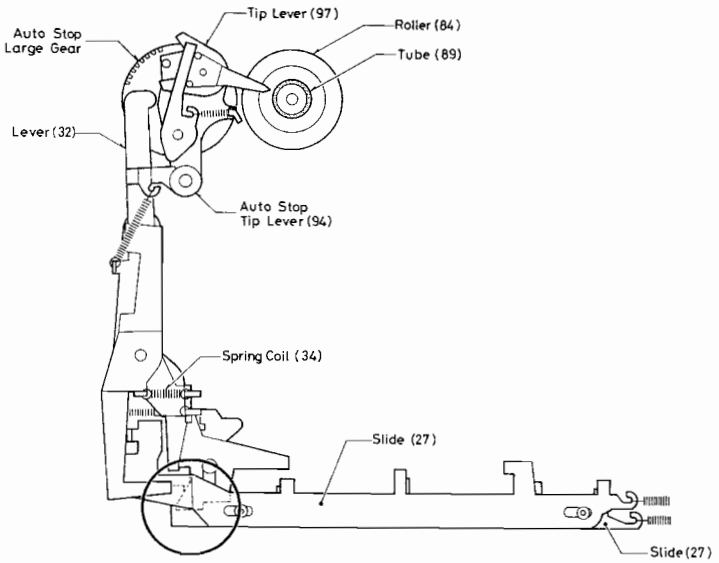


Fig. 5

(4) When the power switch is turned on and the set is placed in play mode, the auto-stop large gear of bracket mounting (99) rotates, and the fixer at the end of auto-stop detection lever (32) is brought into contact with the eccentric part of the autostop large gear. (See Fig. 6)

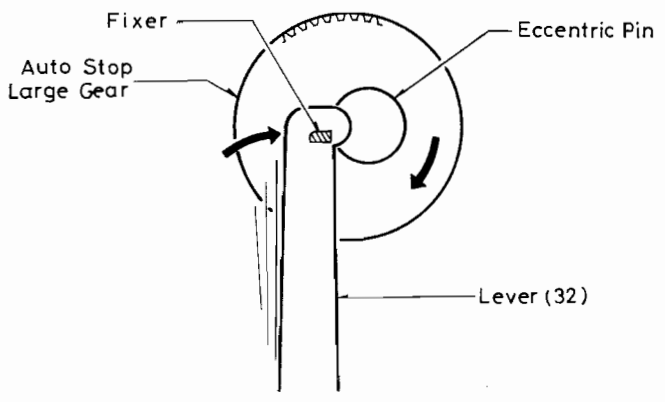


Fig. 6

(5) The tip lever (97), contacting the tube (89) of PLAY take-up roller (84), is kicked in the rotating direction and driven into reciprocal movements: (See Figs. 7,8).)

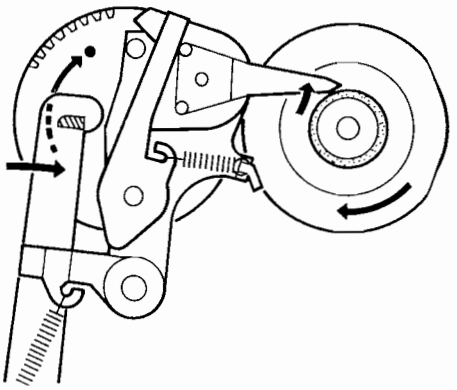


Fig. 7

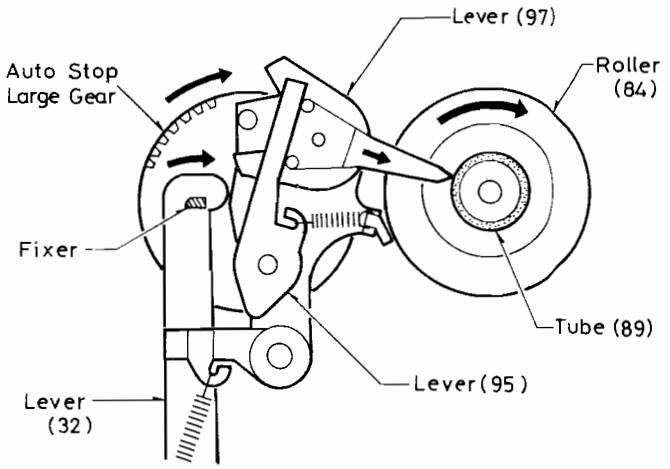


Fig. 8

(6) When the tape runs to its end and the supply pulley (88) stops rotating, roller (84) and tube (89) also stop turning. Then, the end of tip lever (97) hits against the tube to be stopped. In consequence, the auto-stop tip lever (94) ceases its longitudinal movements. As a result, the auto-stop detection lever (32) is also stopped.

(7) Despite stopping of auto-stop detection lever (32), the auto-stop large gear continues to turn until its shaft collides against the fixer of lever (32), which is then pushed to move. (See Fig. 9.)

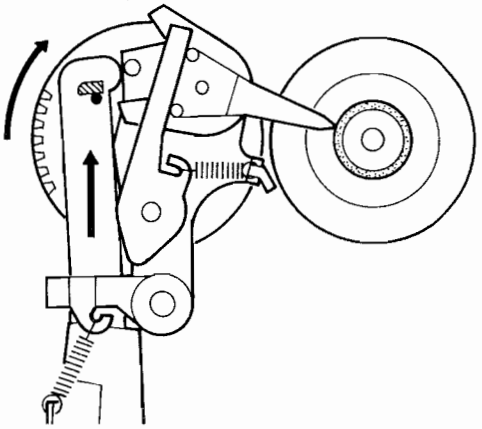


Fig. 9

(8) As the auto-stop detection lever (32) moves, the stop/eject detection lever (33) and the STOP slide (30) will move at the same time. Finally at the projection of STOP slide, the lock slide (28) is kicked aside. (See Fig. 10.)

(9) As the lock slide (28) is kicked aside, the locked (play) state of STOP side is released to return to the original (stop) state.

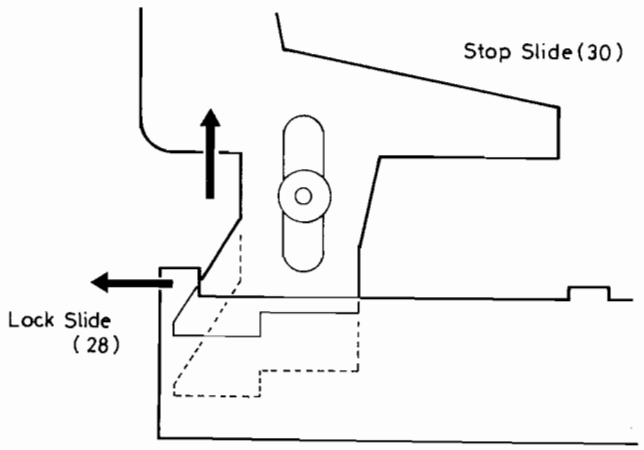


Fig. 10

OPERATION OF AUTO-STOP CIRCUIT

(in F. FWD and REW mode)

(1) When the power switch is turned on, the magnet of rewind gear (100) starts to rotate, and the center of magnetic resistance element (ME) fluctuates to change the resistance, its output, forming sine waveform, will enter C742.

(2) This output, rid of unnecessary direct-current components, will go into the base of Q712.

(3) The output of Q712, rectified by D708 and D709, will charge C740.

(4) When C740 is charged, base voltage is applied to Q711, which is then turned on, thereby lowering in its impedance. As a result, the voltage applied to the base of Q710 is lowered to turn off Q710.

* SCR701 is set in ON state by the pulse input to turn on S711.

(5) When the fast-forwarding or rewinding of tape is terminated to stop the reel rotation, the resistance of ME becomes constant.

(6) Since the resistance is constant, alternating-current component is not generated in the base of Q712, which is therefore turned off.

(7) As a result, the electric charge of C740 is discharged, and the base of Q711 drops to the same potential as the ground, so that Q711 is turned off.

(8) C739 is charged by R742, and Q710 is charged by C739 to be turned on.

(9) As Q710 is turnd on, the gate of SCR701 is forced to drop to the ground, thereby to be turned off. In consequence, when Q709 is turned off, the power is also set off and the motor stops.

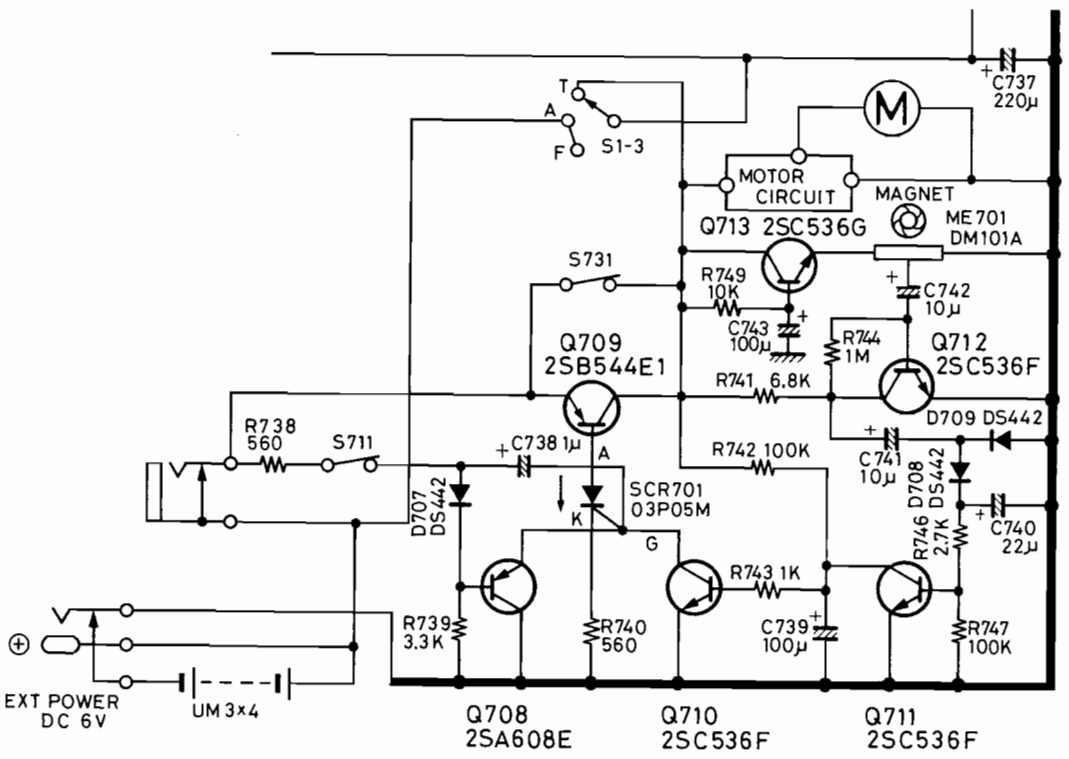


Fig. 11

ADJUSTMENT OF MECHANISM

(1) Adjustment of tape speed (Fig. 12)
Remove back lid (7), then motor PCB will be found. Adjust as follows:
1) Connect tape counter to earphone terminal. Load with 3 kHz test tape.
2) Adjust by turing semivariable resistor of motor PCB until the output frequency from earphone terminal becomes 2990 Hz ±10%.

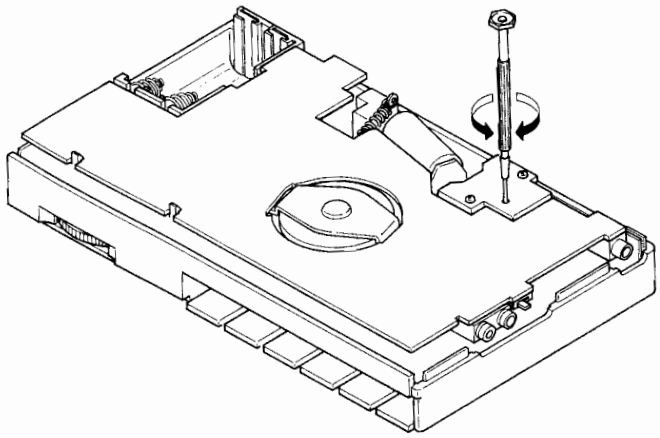


Fig. 12

(2) Adjustment of azimuth (Fig. 13)
Remove cover from above the play button in the cabinet, the azimuth adjusting screw (Y7) for record/playback head will be exposed when set in play mode. Load with recorded tape, set in play mode, then adjust to obtain the undistorted maximum volume.

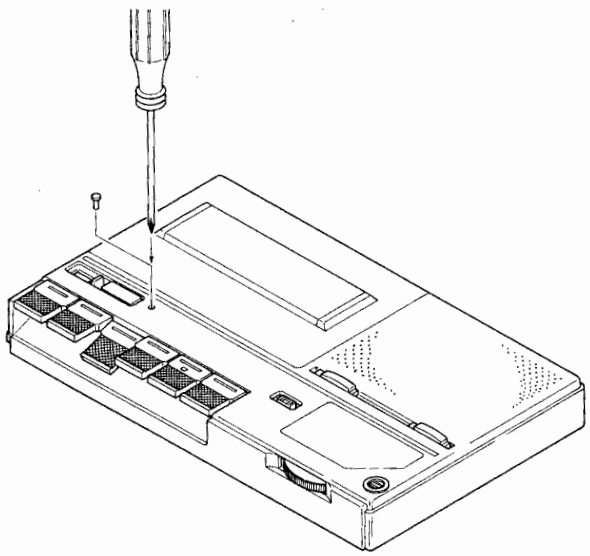


Fig. 13

(3) Measurement of torque tension (Fig. 14)
Before measurement, check visually to see if all parts are working normally, especially if the head and pinch roller are kept clean.

PLAY:	30 to 50 gr-cm
F. FWD:	50 to 100 gr-cm
REW.	45 to 100 gr-cm

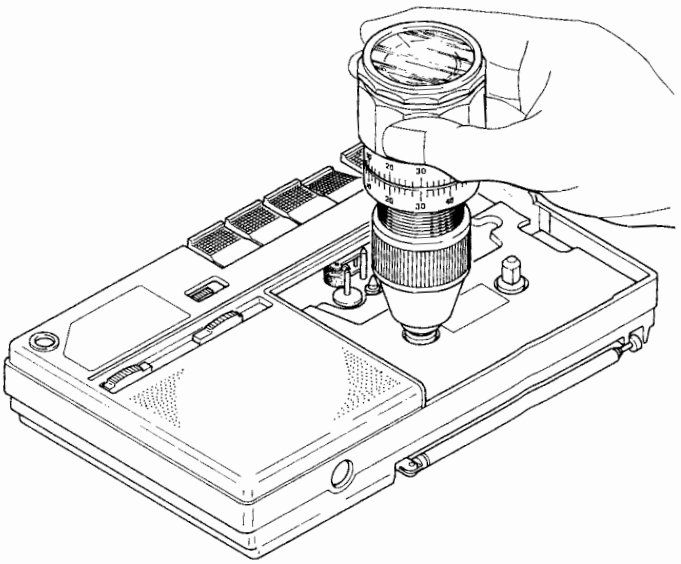


Fig. 14

(4) Measurement of pinch roller pressure (Fig. 15)
In play mode, as illustrated, measure at the position of pinch roller shaft with tension gauge. Measure the pinch roller pressure when the pinch roller is about to stop.

Standard: 230 to 300 gr

If out of this standard, adjust the spring of mechanism No. 40 (141-2-852T-54700).

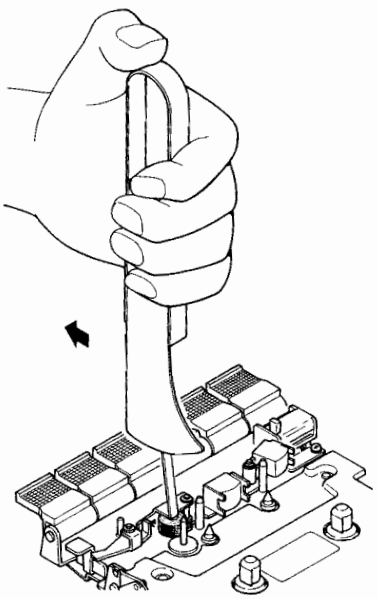


Fig. 15

(5) Measurement of pushbutton operating force (Fig. 16)
The table below shows the standard button operating force, and usually the specified valve is not exceeded. If a stronger force is needed, the function of each part should be inspected.

STOP → PLAY	less than 2.2kg	F.FWD ⇄ REW	less than 1.5kg
STOP → F.FWD	less than 1.5kg	STOP → EJECT	less than 1.5kg
STOP → REW	less than 1,5kg	PLAY → PAUSE	less than 1.5kg
STOP → REC	less than 2.9kg	PLAY, REC, REW, F.FWD. → STOP	less than 1.5kg

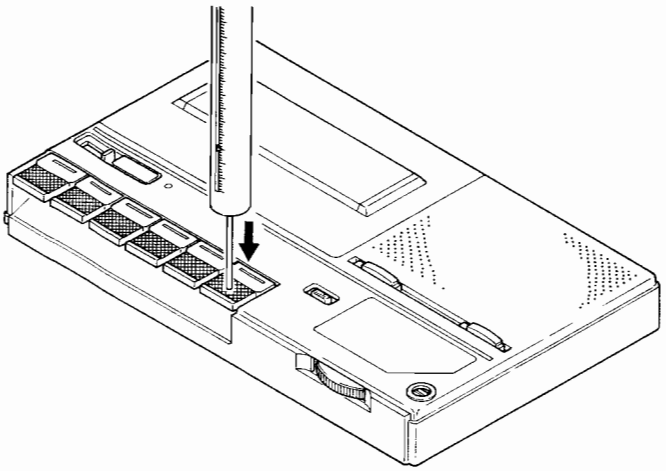


Fig. 16

ADJUSTMENT OF TUNER

When adjusting, keep the supply voltage at 6 volts DC.
The speaker impedance is 7 ohms.

AM		Frequency	Point of adjust.
IF		455kHz	T303 ~ T305
Coverage	Low	505kHz	L106
	Hi	1650kHz	VCT-4
Tracking	Low	600kHz	L105
	Hi	1400kHz	VCT-3

FM		Frequency		Point of adjust.
IF		10.7 MHz	V-curve	T310, T302A
			S-curve	T302B
Coverage	Low	75MHz		L104
	Hi	91MHz		VCT-2
Tracking	Low	76MHz		L102
	Hi	90MHz		VCT-1

Cautions for FM adjustment
* Input points of FM
  IF hot side (H): TP-1
  IF earth side (E): TP-2
* Output points of FM
  IF hot side (H): V-curve, TP-3
  S-curve, TP-5
  IF earth side (E): TP-4
* For FM antenna dummy, use 75-ohm ublanced dummy.

TUNER (PARTS LAYOUT)

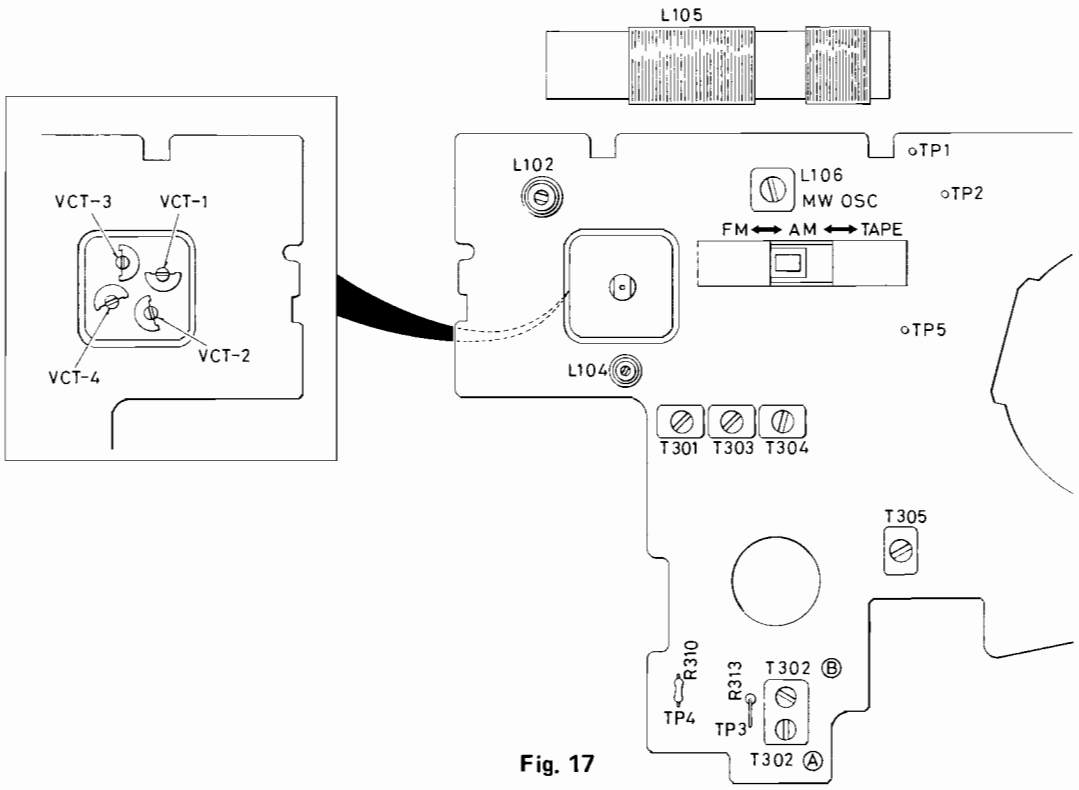


Fig. 17

CAUTIONS FOR INSTALLING PARTS

Adjustment of LED

1. Tune in to 83 MHz in FM. Set output of FM SG to 12 dB. Turn SVR350 (10 kB) until LED is slightly lit.
2. Tune in to 1000 kHz in AM. Make sure LED lights up at less than 78 dB of the output of AM SG, but is not illuminated by random noise.

DIAL SCALE ACCORDANCE

1. Insert rotary knob into gear.
2. Turn rotary knob fully in the arrow direction.
3. Set gear in place so that point A (a cut) of dial scale coincides with point B (a crack in boss).
4. Secure pan head screw (1.7 x 5mm) and washer (2 x 6 x 0.4mm) to the gear. This ends the scale accordance.

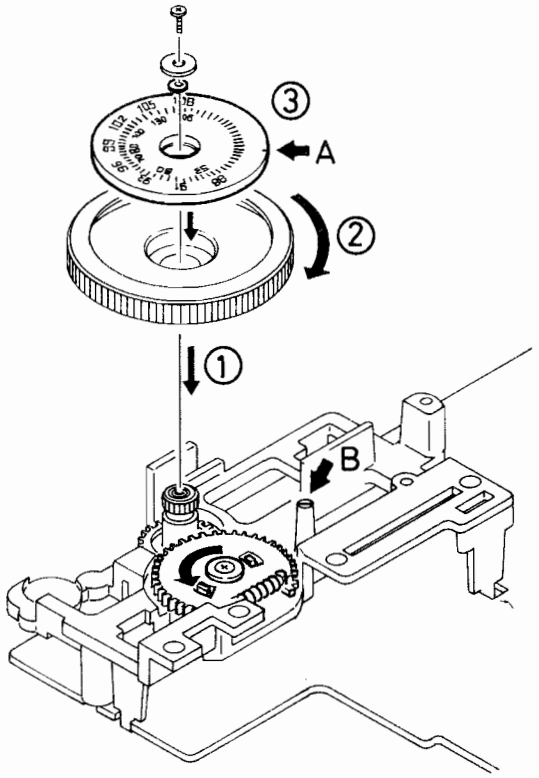
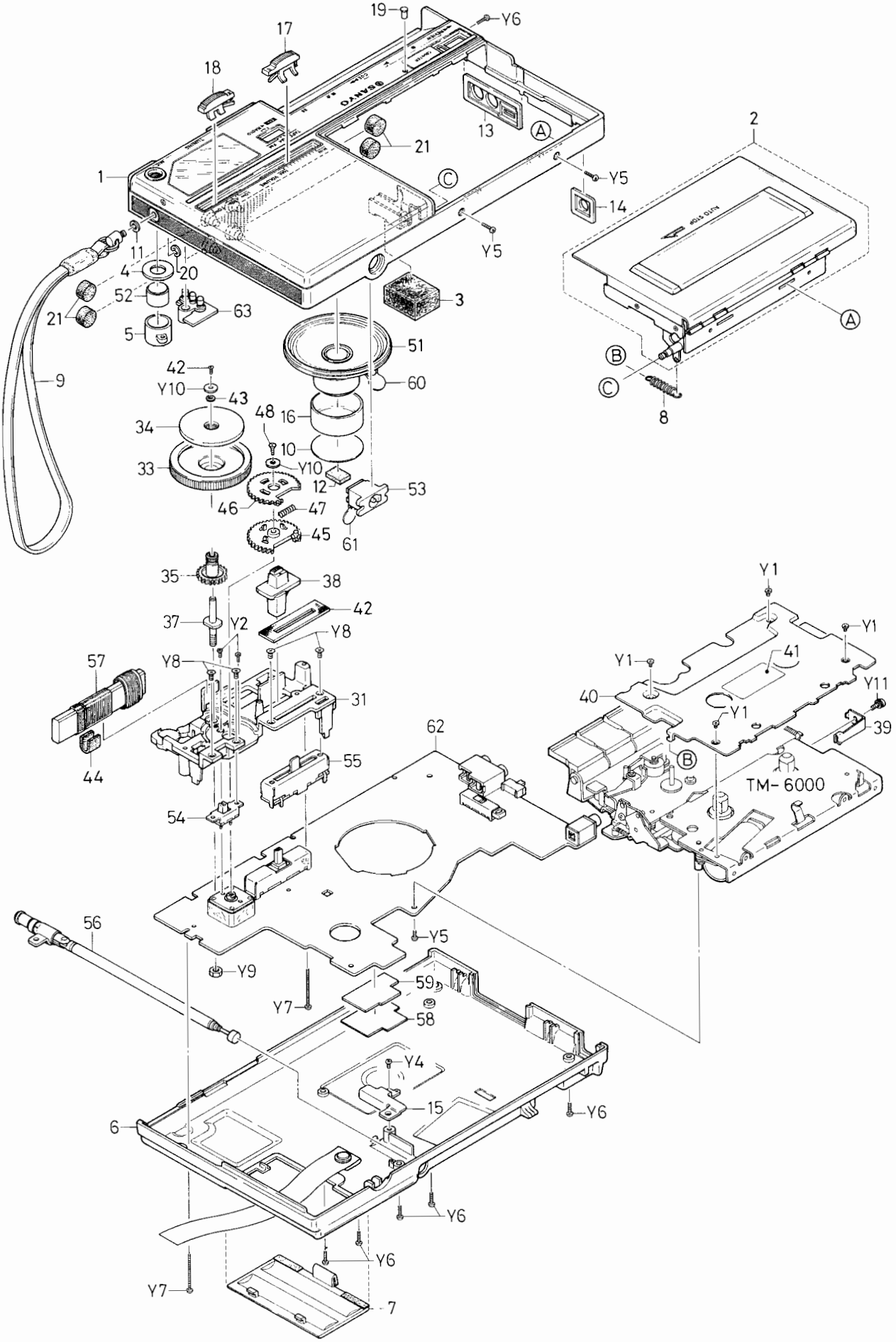


Fig. 18

CABINET & CHASSIS EXPLODED VIEW



PARTS LIST

Ref. No.	Part No.	Description	Q'ty
PACKING			
	141-6-133T-02800	Individual Carton	1
	141-6-144T-54700	Form Plastic Case	1
	141-6-144T-57000	Form Plastic Case	1
	141-6-231T-15300	Inner Polye Cover, Set	1
	141-6-231T-15250	Inner Polye Cover, Inst. M	1
	141-6-231T-06100	Inner Polye Cover, Plug	1
	141-6-331T-06800	Protector Sheet	1
ACCESSORY			
	141-6-410T-27500	Instruction Manual	1
	141-2-181T-11000	Case, Set	1
	4-241T-10884	Cassette Tape	1
	4-235R-11801	Socket	1
	4-195T-00900	Adaptor	1
CABINET			
1	141-0-111T-39402	Cabinet Assy	1
2	141-0-124T-24020	Cassette Comp. Lid Complete	1
3	141-2-447T-41900	Cushion 15 x 20 x 10t	1
4	141-2-447T-09400	Cushion, Bracket Mic	1
5	141-2-385T-03600	Bracket, Mic	1
6	141-0-126T-28802	Back Lid Assy	1
7	141-0-128T-13901	Battery Lid Assy	1
8	141-2-855T-33900	Spring Coil, Cassette Comp. Lid.	1
9	141-2-172T-02300	Hanger, Cabinet	1
10	141-2-447T-07900	Cushion, Speaker	1
11	141-2-453T-30300	Washer 3.1 x 5.4 x 0.13 Nylon	1
12	141-2-447T-67500	Cashion 9 x 6 x 2t	1
13	141-2-367T-31830	Bracket, Mic Socket	1
14	141-2-367T-31930	Bracket, Earphone Socket	1
15	141-2-384T-02900	Bracket, Rod ANT	1
16	141-2-322T-49100	Shiled Plate	1
17	141-2-164T-24601	Slide Knob, VR	1
18	141-2-164T-24701	Slide Knob, Tone	1
19	141-2-135T-63030	Cover	1
20	141-2-457T-23000	Special Washer	1
21	141-2-447T-67600	Cushion 8ϕ x 4t	4
CHASSIS			
31	141-2-312T-17000	Sub Chassis	1
32	141-2-244T-22900	Net	1
33	141-0-163T-60701	Rotary Knob Assy	1
34	141-2-146T-21301	Dial Scale	1
35	141-2-581T-15100	Gear	1
37	141-2-753T-56500	Shaft	1
38	141-2-164T-24801	Slide Knob, RADIO/Tape	1
39	141-2-853T-62100	Spring Plate, Rec	1
40	141-2-241T-21730	Veil	1
41	141-2-157T-33200	Inlay	1
42	141-2-421T-29100	Special Screw	1
43	141-2-453T-61000	Washer 1.8 x 3.5 x 0.3, Dial Scale	1
44	141-2-447T-03400	Cushion 10 x 15	1
45	141-2-581T-16800	Gear, VC	1
46	141-2-581T-16900	Gear, VC	1
47	141-2-855T-47900	Spring Coil, Gear	1
48	141-2-421T-29300	Special Screw	1
HARDWERE			
Y1		Pan Hd. Screw 1.7 x 2	4
Y2		Pan Hd. Screw 1.7 x 3	2
Y4		Pan Hd. Screw 2 x 3	1
Y5		Pan Hd. Screw 2 x 4	7
Y6		Pan Hd. Screw 2 x 6	6
Y7		Pan Hd. screw 2 x 20	2
Y9		Hexagon Nut 3	1
Y10		Washer 2 x 6 x 0.4	2

Ref. No.	Part No.	Description	Q'ty
ELECTRICAL PARTS			
51	4-151T-30200	Speaker	1
52	4-153T-11800 4-153T-11700	or Microphone	1
53	4-235T-54000	Socket, Ext DC	1
54	4-231T-33072	Switch, Tone	1
55	4-222T-73400	Variable Resistor	1
56	4-244T-03600	Telescopic Rod ANT	1
57	4-257T-32000	Antenna coil (L105)	1
58	4-233T-12800	P.C. Board	1
59	141-2-246T-46300	Sheet	1
60		Ceramic Cap, 0.001μF ±10% 50V	1
61		BC Capacitor 0.022μF 25V	1
AMP/TUNER PCB ASSY			
62	141-4-230T-90802	P.C. Board Assy, AMP/TUNER	1
		(AMP SECTION)	
	4-235T-54400	Socket, Mic/Remote	1
	4-235T-54200	Socket, Earphone	1
	4-231T-75500	Switch, R/P	1
	4-258T-20000	OSC Coil	1
	4-231T-86000	Slide Switch, T/AM/FM	1
	4-231T-88300	Switch, Beat	1
IC701		IC LA4140	1
Q702		Transistor 2SC693	1
Q701,703, 704,705, 706,707, 710,711, 712,713		Transistor 2SC536	10
Q708		Transistor 2SA608	1
Q709		Transistor 2SB544	1
D703,708		Diode 1S188 AM	2
D701,702, 707,709		Diode DS442	4
D704		Diode MA 26W	1
ME701		Magnetic Resistor Element	1
SCR701		DM 101A Thyristor 03P05M	1
	CAPACITORS		
C737		Electrolytic 220μF 10V	1
C735		Electrolytic 220μ 6.2V	1
C736, 743 730		Electrolytic 100μF 6.3V	3
C719, 739		Tantal 100μF 3.15V ±20%	2
C711,729, 733		Tantal 47μF 6.3V ±20%	3
C715		Tantal 22μF 6.3V ±20%	1
C740		Tantal 22μF 3.15V ±20%	1
C704,717, 721,723, 724,727		Tantal 1μF 10V ±20%	6
C712,701		Tantal 0.22μF 10V ±20%	2
C702,734		Tantal 0.1μF 10V ±20%	2
C741,742		Tantal 10μF 6.3V ±20%	2
C738		Tantal 1μF 10V ±20%	1
C710,713, 732,726		BC CON 0.22μF 25V ±20%	4
C718		BC CON 0.01μF 25V ±20%	1
C722,731		Ceramic 0.0022μF 50V +80 −20%	2
C703,707, 709,714		Ceramic 0.001μF 50V ±10%	4
C708		Ceramic 270PF 50V ±10%	1
C728,725		Ceramic 220PF 50V ±10%	2
C706		Ceramic 180PF 50V ±10%	1
C705		Ceramic 100PF 50V ±10%	1
C720		Ceramic 120PF 50V ±10%	1
	RESISTORS		
R716,744		Carbon 1M ohm ±10% 1/4W	2
R708		Carbon 820K ohm ±10% 1/4W	1
R723		Carbon 560K ohm ±10% 1/4W	1
R707		Carbon 180K ohm ±10% 1/4W	1

PARTS LIST

Ref. No.	Part No.	Description	Q'ty
AMP/TUNER PCB ASSY			
R720		Carbon 39K ohm ±10% 1/4W	1
R709		Carbon 22K ohm ±10% 1/4W	1
R704,705, 727		Carbon 6.8K ohm ±10% 1/4W	3
R714,715		Carbon 5.6K ohm ±10% 1/4W	2
R711,719		Carbon 4.7K ohm ±10% 1/4W	2
R702		Carbon 3.3K ohm ±10% 1/4W	1
R713,724		Carbon 1.5K ohm ±10% 1/4W	2
R725		Carbon 270 ohm ±10% 1/4W	1
R732,729		Carbon 100 ohm ±10% 1/4W	2
R731		Carbon 150 ohm ±10% 1/4W	1
R738		Carbon 560 ohm ±10% 1/4W	1
R718		Carbon 390 ohm ±10% 1/4W	1
R728		Carbon 1.2K ohm ±10% 1/4W	1
R706		Carbon 82K ohm ±10% 1/8W	1
R717		Carbon 8.2K ohm ±10% 1/8W	1
R737		Carbon 680 ohm ±10% 1/8W	1
R735,740		Carbon 560 ohm ±10% 1/8W	2
R726		Carbon 120 ohm ±10% 1/8W	1
R742,721		Carbon 100K ohm ±10% 1/8W	2
R734		Carbon 5.6K ohm ±10% 1/8W	1
R741		Carbon 6.8K ohm ±10% 1/8W	1
R739		Carbon 3.3K ohm ±10% 1/8W	1
R743,701		Carbon 1K ohm ±10% 1/8W	2
R747		Carbon 100K ohm ±10% 1/8W	1
R710		Carbon 15 ohm ±10% 1/8W	1
R712		Carbon 10 ohm ±10% 1/8W	1
R736		Carbon 180K ohm ±10% 1/8W	1
R746		Carbon 2.7K ohm ±10% 1/8W	1
R749		Carbon 10K ohm ±10% 1/8W	1
R733		Carbon 150 ohm ±10% 1/8W	1
	(TUNER SECTION)		
L104	4-265T-51900	V.H.F Coil	1
L102	4-265T-52800	V.H.F Coil	1
L103	4-265R-12700	V.H.F Coil	1
L106	4-258T-13241	O.S.C Coil	1
T301	4-256T-13110	I.F.T	1
T303,304	4-256T-13210	I.F.T	2
T305	4-256T-13310	I.F.T	1
T302	4-256T-10310	I.F.T	1
VCT1-4, VC1-4	4-224T-12800	Variable Capacitor	1
CR301	4-227R-11600	CR Pack	1
CR302	4-227T-01500	CR Pack	1
B101	123-2-471R-10900	Core	1
	4-253T-11900	R.F Filter	1
SVR350	4-222T-69975	Semifixed Variable resistor 10K-B	1
CF301	4-256T-80400	I.F. Filter 10.7M Red	1
	4-256T-80471	I.F. Filter 10.67M Blue	
	4-256T-80472	I.F. Filter 10.73M Orange	or
	4-256T-80473	I.F. Filter 10.64M Black	
	4-256T-80474	I.F. Filter 10.76M White	
	141-2-322T-49200	Shield Plate	1
	141-2-322T-51400	Shield Plate	1
Q102,103, 104,301, 302,303		Transistor 2SC930	6
Q351,352		Transistor 2SC536	2
D301,302		Diode 1N60 FM	2
D104,105, 303		Diode DS442X	3
D103		Diode 1S553	1
D304		Diode MV11 T	1
D305		Diode YZ047A	1
D102,306, 350,352, 353,351		Diode DS442 X	6

Ref. No.	Part No.	Description	Q'ty
AMP/TUNER PCB ASSY			
	CAPACITORS		
C311		Ceramic 1PF 50V ±0.25PF	1
C113		Ceramic 3PF 50V ±0.25PF	1
C351		Ceramic 12PF 50V ±10%	1
C105		Ceramic 5PF 50V ±0.25PF	1
C124		Ceramic 6PF 50V ±0.5PF	1
C107		Ceramic 8PF 50V ±0.5PF	1
C106		Ceramic 30PF 50V ±10%	1
C115,132		Ceramic 10PF 50V ±10%	2
C104		Ceramic 18PF 50V ±10%	1
C310		Ceramic 82PF 50V ±10%	1
C355,108		Ceramic 220PF 50V ±10%	2
C102,109, 110,353, 127,111		Ceramic 0.001μF 50V ±10%	6
C301		Ceramic 0.01μF 50V +80 −20%	1
C350		Ceramic 4PF 50V ±0.25PF	1
C103,356, 126,131, 307		BC CON 0.01μF25V ±20%	5
C116,123, 304,354		BC CON 0.022μF 25V ±20%	4
C352,324		BC CON 0.022μF 25V ±20%	2
C309		BC CON 0.1μF 12V ±20%	1
C118		BC CON 0.1μF 12V ±20%	1
C114,117, 302,306, 317,322, 323		BC CON 0.022μF 16V ±30%	7
C316,120		Myalr 0.0068μF 50V ±20%	2
C119		Mylar 0.01μF 50V ±20%	1
C308		Mylar 0.022μF 50V ±20%	1
C320		Tantal 0.1μF 35V ±20%	1
C315		Tantal 4.7μF 6.3V ±20%	1
C321		Electrolytic 220μF 6.3V	1
C318		Electrolytic 4.7μF 6.3V	1
C122		Styrol 140PF 50V ±5%	1
	RESISTORS		
R112		Carbon 220 ohm ±10% 1/8W	1
R313		Carbon 270 ohm ±10% 1/8W	1
R351		Carbon 270 ohm ±10% 1/8W	1
R352		Carbon 820 ohm ±10% 1/8W	1
R315,316, 310		Carbon 1K ohm ±10% 1/8W	3
R319		Carbon 2.2K ohm ±10% 1/8W	1
R107,320		Carbon 100K ohm ±10% 1/8W	2
R102		Carbon 150K ohm ±10% 1/8W	1
R113		Carbon 5.6K ohm ±10% 1/8W	1
R324		Carbon 100 ohm ±10% 1/8W	1
R301		Carbon 33 ohm ±10% 1/8W	1
R353		Carbon 27K ohm ±10% 1/8W	1
R317		Carbon 68K ohm ±10% 1/8W	1
R322		Carbon 22K ohm ±10% 1/8W	1
R318		Carbon 5.6K ohm ±10% 1/8W	1
R306		Carbon 560 ohm ±10% 1/8W	1
R106		Carbon 1.8K ohm ±10% 1/8W	1
R311		Carbon 330 ohm ±10% 1/8W	1
R101		Carbon 1.5K ohm ±10% 1/8W	1
R305		Carbon 33 ohm ±10% 1/4W	1
R108		Carbon 100 ohm ±10% 1/4W	1
R104		Carbon 680 ohm ±10% 1/4W	1
R314		Carbon 1K ohm ±10% 1/4W	1
R110		Carbon 1.5K ohm ±10% 1/4W	1
R307		Carbon 330 ohm ±10% 1/4W	1
R321		Carbon 10K ohm ±10% 1/4W	1
R105,302		Carbon 15K ohm ±10% 1/4W	2
R325		Carbon 56K ohm ±10% 1/4W	1
R350		Carbon 270K ohm ±10% 1/4W	1
R303		Carbon 180 ohm ±10% 1/4W	1
R308		Carbon 560 ohm ±10% 1/4W	1
R304		Carbon 1K ohm ±10% 1/4W	1
R103		Carbon 10 ohm ±10% 1/8W	1
R109		Carbon 15K ohm ±10% 1/4W	1
R309		Carbon 270K ohm ±10% 1/4W	1
R323		Carbon 47 ohm ±10% 1/8W	1
R312		Carbon 2.2K ohm ±10% 1/8W	1

PARTS LIST

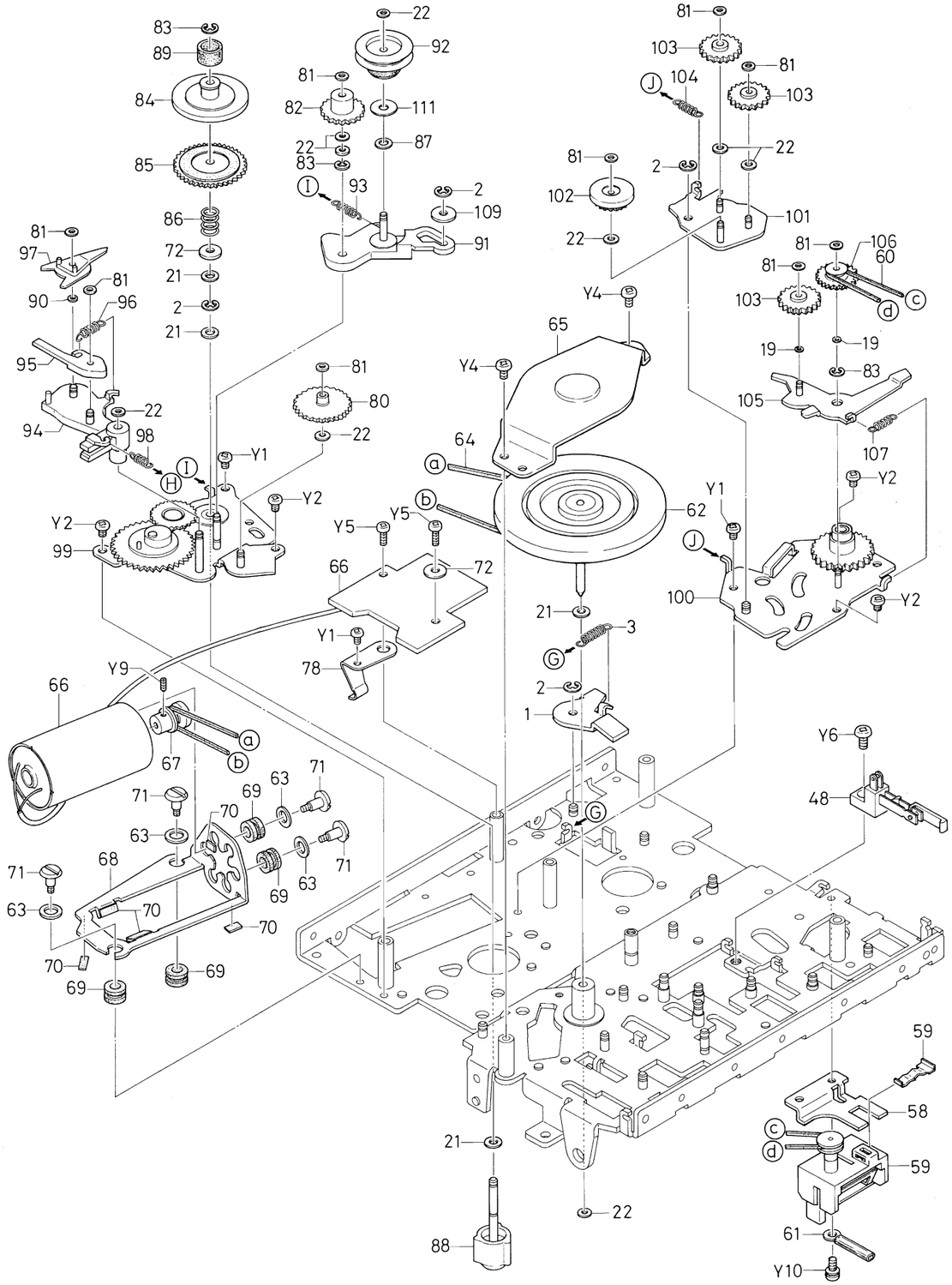
Ref. No.	Part No.	Description	Q'ty
LED PCB ASSY			
63	141-4-230T-93500	P.C. Board Assy, LED	1
D705, 706		LED SLP114 B Red, Power, Rec/Batt	2
		LED SLP214 B Green, Tuning	1
	141-2-352T-36500	Spacer	1

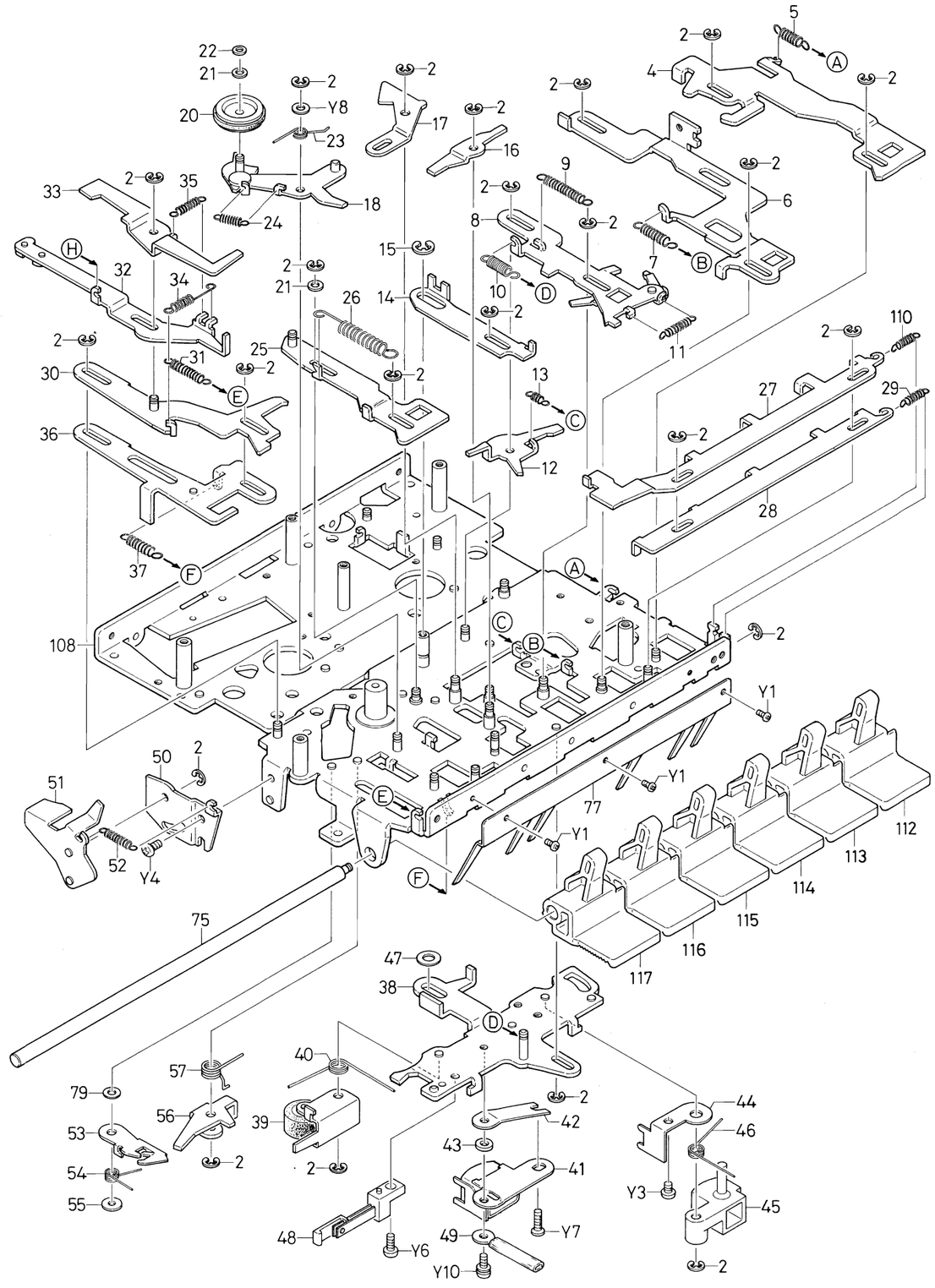
PARTS LIST

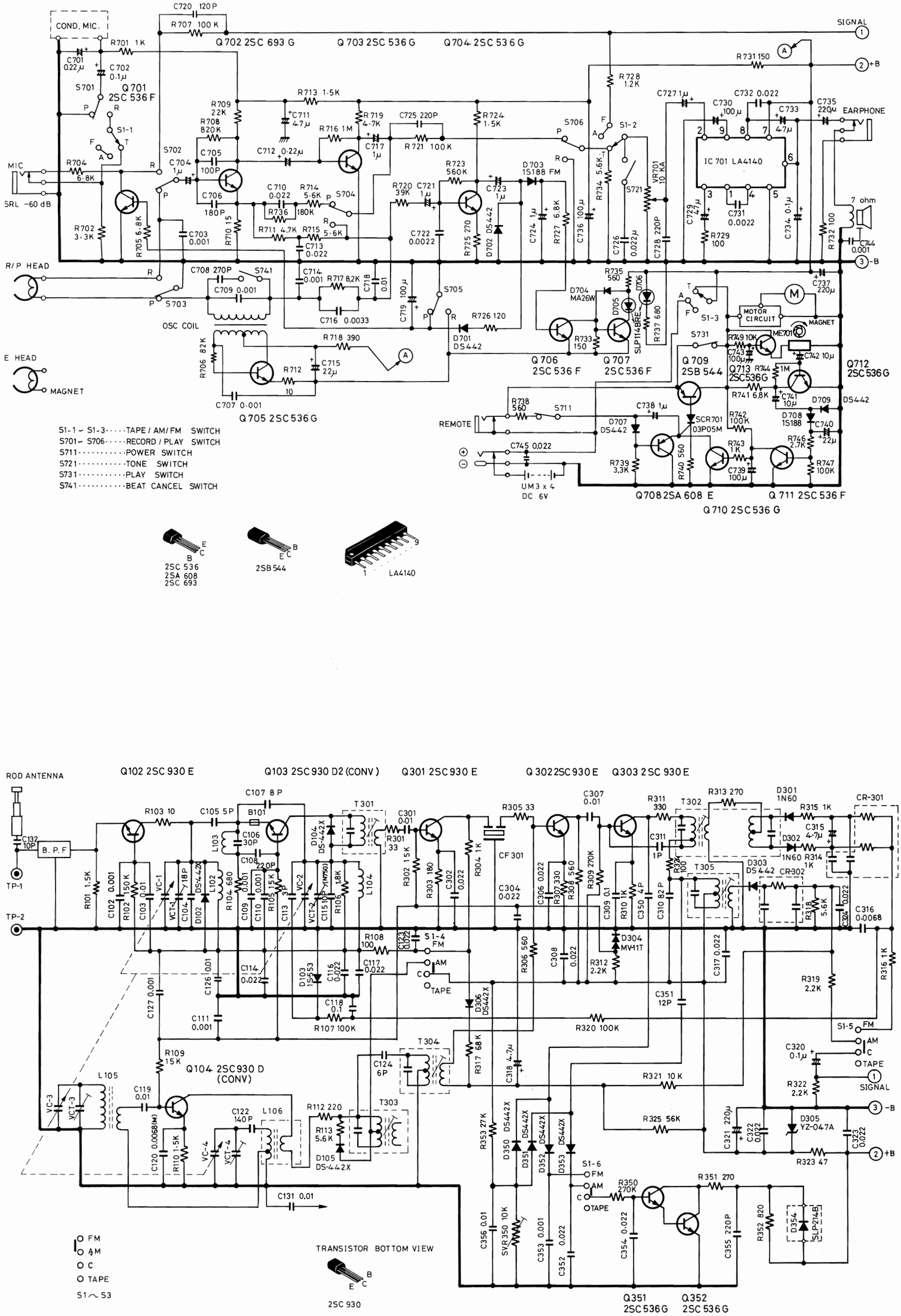
Ref. No.	Part No.	Description	Q'ty
MECHANISM			
1	141-2-742T-27800	Lever	1
2	141-2-457T-23800	Special Washer	26
3	141-2-855T-36100	Spring Coil	1
4	141-2-731T-67500	Slide	1
5	141-2-855T-34900	Spring Coil	1
6	141-2-731T-67600	Slide	1
7	141-2-855T-35300	Spring Coil	1
8	141-0-731T-67700	Slide Assy	1
9	141-2-855T-35400	Spring Coil	1
10	141-2-855T-35500	Spring Coil	1
11	141-2-855T-36500	Spring Coil	1
12	141-2-742T-27900	Lever, Levue	1
13	141-2-855T-35200	Spring Coil	1
14	141-2-731T-67800	Slide	1
15	141-2-457T-23000	Special Washer	1
16	141-2-742T-28000	Lever, Que	1
17	141-2-742T-28100	Lever, Idler	1
18	141-0-742T-28200	Lever Assy, Idler	1
19	141-2-453T-30002	Washer 1.7 x 3.2 x 0.5 Nylon	2
20	141-2-551T-03200	Idler, Play	1
21	141-2-453T-30101	Washer 2.1 x 4 x 0.25 Nylon	7
22	141-2-453T-30001	Washer 1.7 x 3.2 x 0.25 Nylon	9
23	141-2-852T-54900	Spring Wire	1
24	141-2-855T-39000	Spring Coil	1
25	141-0-731T-68100	Slide Assy, Fwd	1
26	141-2-855T-35600	Spring Coil	1
27	141-2-731T-67900	Slide, Switch	1
28	141-2-731T-68000	Slide, Lock	1
29	141-2-855T-34800	Spring Coil	2
30	141-0-731T-68200	Slide Assy, Stop	1
31	141-2-855T-35700	Spring Coil	1
32	141-0-742T-29400	Lever Assy, Auto Stop	1
33	141-2-742T-29000	Lever, Stop eject	1
34	141-2-855T-36200	Spring Coil	1
35	141-2-855T-36000	Spring Coil	1
36	141-0-731T-68300	SLide Assy, Pause	1
37	141-2-855T-35800	Spring Coil	1
38	141-0-731T-68500	Slide Assy, Head	1
39	141-0-545T-05700	Lever, Pinchroller Assy	1
40	141-2-852T-54700	Spring Wire	1
41	4-242T-22600	Head R/P	1
42	141-2-853T-60800	Spring Plate	1
43	141-2-462T-55100	Boss, R/P Head	1
44	141-2-821T-11800	Tape Guide	1
45	4-242T-22800	Haed, E	1
46	141-2-852T-54800	Spring Wire	1
47	141-2-453T-30302	Washer 3.1 x 5.4 x 0.5 Nylon	1
48	4-231T-71201	Switch	2
49	141-2-472T-02200	Lug	1
50	141-2-747T-17700	Bracket, Lever	1
51	141-0-742T-28900	Lever Assy, Eject	1
52	141-2-855T-44600	Spring Coil	1
53	141-2-742T-28800	Lever, Pause Lock	1
54	141-2-852T-54500	Spring Wire	1
55	141-2-453T-30100	Washer 2.4 x 4 x 0.13 Nylon	1
56	141-2-742T-28700	Lever	1
57	141-2-852T-54600	Spring Wire	1
58	141-2-812T-07700	Bracket, Counter	1
59	141-2-811T-07000	Counter	1
60	141-2-564T-20400	Square Belt, Counter	1
61	141-2-472T-02200	Lug	1
62	141-0-521T-09401 141-0-521T-09400	Flywheel Assy } or Flywheel Assy }	1
63	141-2-453T-30200	Washer 2.6 x 4.7 x 0.13 Nylon	4
64	141-2-564T-20300	Square Belt	1
65	141-0-524T-08300	Bracket, Flywheel Assy	1
66	4-527T-13100	Motor	1
67	141-2-661T-74200	Pully, Motor	1
68	141-2-378T-09700	Bracket, Motor	1
69	141-2-445T-21700	Rubber Cushion	4
70	141-2-447T-66700	Cushion 3 x 5 x 1t	5
71	141-2-421T-27601	Special Screw	4

Ref. No.	Part No.	Description	Q'ty
MECHANISM			
72	141-2-453T-03000	Washer 2 x 5 x 0.3t	2
75	141-2-753T-61800	Shaft	1
77	141-2-853T-60900	Spring Plate	1
78	141-2-853T-61000	Spring Plate	1
79	141-2-453T-32901	Washer 1.7 x 4.5 x 0.25 Nylon	1
80	141-2-581T-13900	Gear	1
81	141-2-453T-31500	Washer 1.3 x 3 x 0.25t	9
82	141-2-581T-14000	Gear	1
83	141-2-457T-23700	Special Washer	3
84	141-2-547T-02600	Roller	1
85	141-0-581T-14100	Gear Assy	1
86	141-2-855T-34200	Spring Coil	1
88	141-0-532T-04200	Reel Guide Assy	1
89	141-2-490T-12601	Tube 3.5 x 3.2 ℓ	1
90	141-2-453T-30000	Washer 1.7 x 3.2 x 0.13 Nylon	1
91	141-0-742T-28400	Lever Assy	1
92	141-2-551T-03301	Idler	1
93	141-2-855T-35900	Spring Coil	1
94	141-0-742T-29300	Lever Assy	1
95	141-2-742T-29100	Lever	1
96	141-2-855T-36400	Spring Coil	1
87	141-2-742T-29200	Lever	1
98	141-2-855T-36300	Spring Coil	1
99	141-0-351T-48500	Bracket Mounting Assy	1
100	141-0-581T-14700	Gear Assy	1
101	141-0-742T-28500	Lever Assy	1
102	141-2-581T-14200	Gear	1
103	141-2-581T-14500	Gear	3
104	141-2-855T-39000	Spring Coil	1
105	141-0-742T-28600	Lever Assy	1
106	141-2-581T-14600	Gear	1
107	141-2-855T-35000	Spring Coil	1
108	141-0-311T-30900	Chassis Assy	1
109	141-2-453T-11300	Special washer	1
110	141-2-855T-44600	Spring coil	1
111	141-2-457T-11301	Special Washer	1
112	141-2-611T-13300 141-2-611T-13301	Lever, Push button Rew, Silver } or Lever, Push button Rew, Black }	1
113	141-2-611T-13400 141-2-611T-13401	Lever, Push button Rec, Silver } or Lever, Push Button Rec, Black }	1
114	141-2-611T-13500 141-2-611T-13501	Lever, Push button Play, Silver } or Lever, Push button Rew, Black }	1
115	141-2-611T-13600 141-2-611T-13601	Lever, Push button F.F. Silver } or Lever, Push button F.F., Black }	1
116	141-2-611T-13700 141-2-611T-13701	Lever, Push button Stop, Silver } or Lever, Push button Stop, Black }	1
117	141-2-611T-13800 141-2-611T-13801	Lever, Push button Pause, Silver } or Lever, Push button Pause, Black }	1
MECHANISM HARDWERE			
Y1		Pan Hd. Screw 1.7 x 2	6
Y2		Pan Hd. Screw 1.7 x 2.5	4
Y3		Pan Hd. Screw 2 x 2	1
Y4		Pan Hd. Screw 2 x 3	3
Y5		Pan Hd. Screw 2 x 4	2
Y6		Pan Hd. Screw 2.6 x 4	2
Y7		Flat Hd. Screw 2 x 6	1
Y8		Washer 2 x 4.3 x 0.4t	1
Y10		Pan Hd. Screw w/Spring washer 2 x 4	2

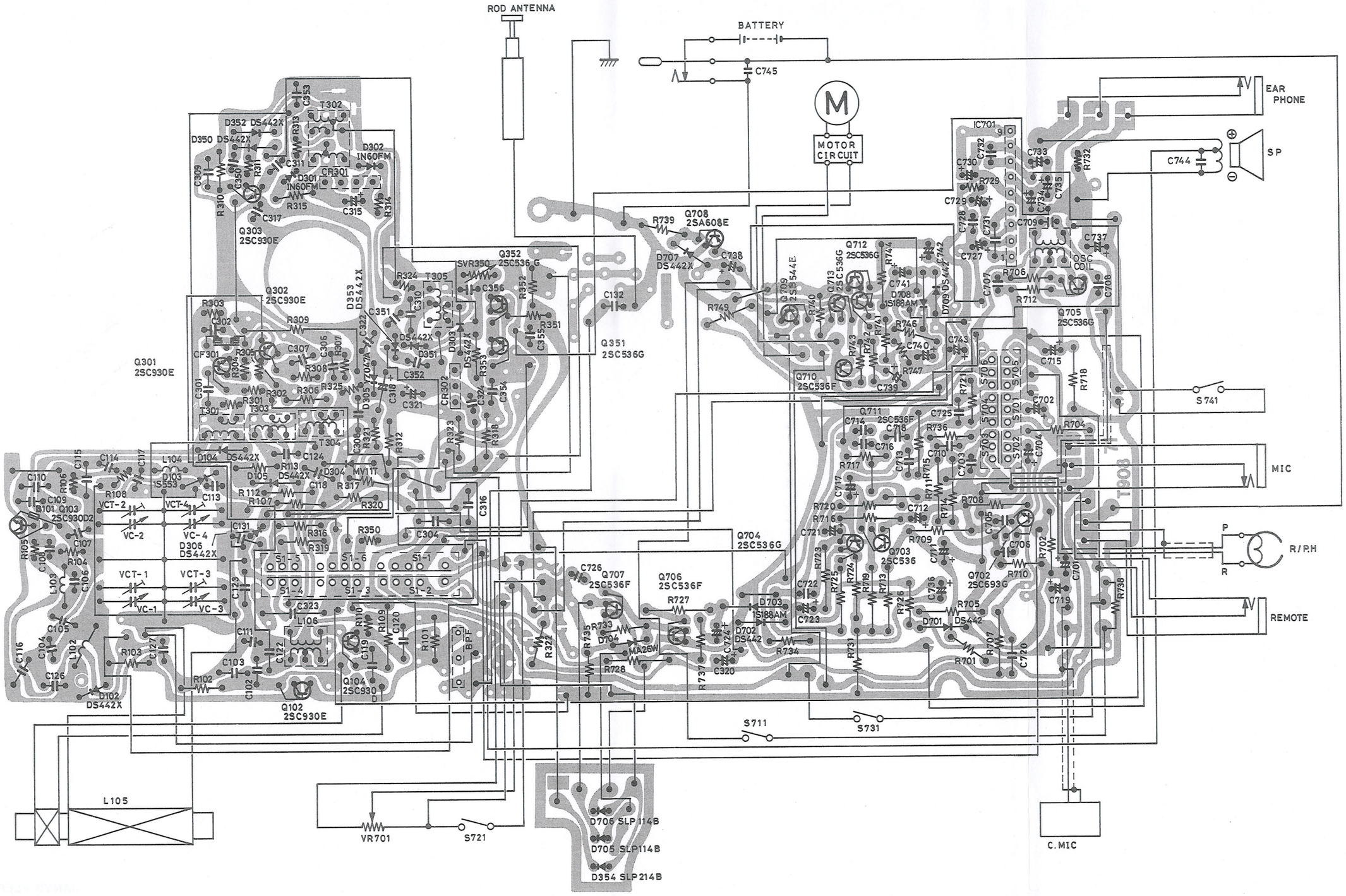
MECHANISM EXPLODED VIEW






COND. MIC.
C720 120P
R707 100K
Q702 2SC 693 G
Q703 2SC 536 G
Q704 2SC 536 G
SIGNAL
+B
-B
EARPHONE
R701 1K
C701 0.22μ
C702 0.1μ
S701
Q701 2SC 536 F
S1-1
S1-2
S1-3
S706
MIC
SRL -60 dB
R704 6.8K
S702
C704 1μ
R709 22K
R708 820K
C705 100P
C706 180P
C712 0.22μ
R713 1.5K
C711 47μ
R716 1M
R719 4.7K
C717 1μ
C725 220P
R721 100K
R724 1.5K
R723 560K
C723 1μ
D703 1S188 FM
R720 39K
C721 1μ
C722 0.0022
R725 270
D702 DS442
C724 1μ
R727 6.8K
C736 100μ
R734 5.6K
VR701 10 KA
R728 1.2K
R731 150
C727 1μ
C730 100μ
C732 0.022
C733 4.7μ
C735 220μ
IC 701 LA4140
C729 47μ
C731 0.0022
C734 0.1μ
R729 100
R732 100
7 ohm
C744 0.001
C737 220μ
C710 0.022
R714 5.6K
S704
R736 180K
R711 4.7K
R715 5.6K
C713 0.022
R710 15
C703 0.001
R705 6.8K
R702 3.3K
R/P HEAD
S703
C708 270P
S741
C709 0.001
C714 0.001
R717 8.2K
C718 0.01
C716 0.0033
C719 100μ
S705
R726 120
D701 DS442
OSC COIL
R718 390
R706 82K
R712 10
C715 22μ
C707 0.001
Q705 2SC536G
E HEAD
MAGNET
D704 MA26W
D706
D705 SLP114RE
R735 560
R737 680
R733 150
Q706 2SC 536 F
Q707 2SC536 F
Q709 2SB 544
Q712 2SC536G
MOTOR CIRCUIT
MAGNET
M
S731
ME701
R749 10K
C743 100μ
C742 10μ
R744 1M
Q713 2SC536G
R741 6.8K
C741 10μ
D709 DS442
D708 1S188
C740 22μ
R746 2.7K
R747 100K
R743 1K
C739 100μ
R742 100K
SCR701 03P05M
C738 1μ
R738 560
S711
REMOTE
D707 DS442
C745 0.022
R739 3.3K
R740 560
UM3 x 4
DC 6V
Q708 2SA 608 E
Q711 2SC 536 F
Q710 2SC536 G
S1-1 ~ S1-3 ····· TAPE / AM / FM SWITCH
S701 ~ S706 ····· RECORD / PLAY SWITCH
S711 ····· POWER SWITCH
S721 ····· TONE SWITCH
S731 ····· PLAY SWITCH
S741 ····· BEAT CANCEL SWITCH
2SC 536
2SA 608
2SC 693
2SB544
LA4140

ROD ANTENNA
Q102 2SC 930 E
Q103 2SC 930 D2 (CONV)
Q301 2SC 930 E
Q 3022SC 930 E
Q303 2SC 930 E
C132 10P
B. P. F
TP-1
TP-2
C107 8 P
B101
R103 10
C105 5P
C106 30P
C108 220P
T301
D104 DS-442X
R301 33
R305 33
CF 301
C307 0.01
R311 330
T302
R313 270
D301 1N60
R315 1K
CR-301
C315 4.7μ
D302 1N60
R314 1K
C311 1P
R310 1K
C350 4P
C310 82 P
T305
D303 DS442
CR302
R318 5.6K
C316 0.0068
R301 1.5K
C102 0.001
R102 150K
C103 0.01
VC-1
C104 18P
DS-442X
D102
L102
R104 680
C109 0.001
C110 0.001
R105 15K
C113 3P
VC-2
C115 10P (N750)
R106 1.8K
L104
R302 1.5K
R303 180
C302 0.022
R304 1K
C304 0.022
C306 0.022
R307 330
R308 560
R309 270K
C309 0.1
R108 100
C123 0.022
S1-4
FM
AM
C
TAPE
D304 MV-11T
R312 2.2K
C308 0.022
R306 560
C317 0.022
R319 2.2K
R316 1K
C114 0.022
C126 0.01
C127 0.001
C111 0.001
D103 1S553
C116 0.022
C117 0.022
C118 0.1
R107 100K
D306 DS442X
R320 100K
C351 12P
S1-5
C320 0.1μ
R322 2.2K
SIGNAL
R109 15K
Q104 2SC930 D
(CONV)
T304
C124 6P
R317 68K
C318 4.7μ
R321 10K
L105
C119 0.01
VC-3
VCT-3
C122 140P
L106
R112 220
T303
R113 5.6K
D105 DS-442X
C120 0.0068(M)
R110 1.5K
VC-4
VCT-4
R353 27K
D350 DS442X
D351 DS442X
D352 DS442X
D353 DS442X
R325 56K
C321 220μ
C322 0.022
D305 YZ-047A
C323 0.022
R323 47
S1-6
FM
AM
C
TAPE
R350 270K
R351 270
C356 0.01
SVR350 10K
C353 0.001
C352 0.022
C354 0.022
C355 220P
R352 820
D354 SLP214B
C131 0.01
TRANSISTOR BOTTOM VIEW
2SC 930
Q351 2SC536G
Q352 2SC536G


ROD ANTENNA
BATTERY
C745
M
MOTOR CIRCUIT
EAR PHONE
SP
C744
IC701
C732
C733
C730
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C729
C734
C735
R732
C728
C731
C709
C737
OSC COIL
C708
C727
R706
R712
C707
Q712 2SC536G
R744
C741
D708 1S188AM
D709 DS442
C742
R746
C740
R747
C739
Q710 2SC536F
R739
Q708 2SA608E
D707 DS442X
C738
R749
C132
Q705 2SC536G
C715
R718
S741
C702
R704
C704
MIC
T303
P
R
R/P.H
REMOTE
C.MIC
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C710
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S702
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R711
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C722
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R705
R710
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Q702 2SC693G
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C720
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D704 MA26W
R735
R728
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S731
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R303
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R309
CF301
R305
R304
C307
C305
R307
R308
C301
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R306
R325
C308
C321
T304
C352
C351
D351
D353 DS442X
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T305
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Q302 2SC930E
D352 DS442X
D350 DS442X
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C311
T302
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R313
D301 1N60FM
R315
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D302 1N60FM
CR301
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R314
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C324
CR302
R323
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R321
R312
C306
D305 Y074A
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D306 DS442X
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C304
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R320
R317
MV11T
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R112
R107
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R113
C124
D104 DS442X
L104
C114
C115
C117
D103 1S553
C110
C109
R106
R108
VCT-2
VC-2
VCT-4
VC-4
C113
Q103 2SC930D2
R101
C107
R104
C106
L103
R105
C108
VCT-1
VC-1
VCT-3
VC-3
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C131
R316
R319
S1-5
S1-6
S1-1
S1-4
S1-3
S1-2
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L106
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C104
C116
C126
L102
R103
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C103
C102
R102
D102 DS442X
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C120
C119
Q104 2SC930D
R101
BPF
R322
L105
VR701
S721
D706 SLP114B
D705 SLP114B
D354 SLP214B